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BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION OCKET FILE COPY ORIGINAL
WASHINGTON, D.C. 20554

In the Matter of

Amendment of Part 90 of the Commission's Rules to Adopt Regulations for Automatic Vehicle Monitoring Systems

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#### LIMITED EX PARTE COMMENTS OF SPECTRALINK CORPORATION

SpectraLink Corporation ("SpectraLink"), pursuant to Section 1.1206 of the Commission's Rules, 47 C.F.R. § 1.1206 (1992), hereby submits these limited *ex parte* comments to oppose AirTouch Teletrac's August 12, 1994, *ex parte* comments in response to the Commission's informal request for comment on its compromise proposal to accommodate local monitoring systems ("LMS") and Part 15 device operations in the 902-928 MHz band. Depart Link specifically opposes AirTouch's proposal to include in the list of Part 15 devices presumed to cause harmful interference, Part 15 devices that: (a) operate at fixed installations located within one-half mile of an LMS receive site, and Part 15 devices (b) that transmit for longer than one second over any ten-second period. SpectraLink also opposes AirTouch's requests that the Commission broaden its proposal to apply a 6 dBi antenna gain limit to 1 watt Part 15.247 devices to include all Part 15.247 devices. In SpectraLink's view AirTouch's

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In an effort to cultivate a consensus on LMS system proponents and Part 15 manufacturers sharing the band, the Commission identified three categories of Part 15 devices that are presumed to cause harmful interference. These are Part 15 devices with antennas greater than 5m above ground level, 1 watt Part 15.247 devices with greater than 6 dBi of antenna gain, or Part 15.245 devices.

See Ex Parte Comments of AirTouch Teletrac at 4, PR Docket No. 93-61, RM-8013 (filed August 12, 1994).

proposed modifications to the Commission's proposal are overbroad, and would unnecessarily foreclose operation of non-interfering Part 15 devices in the 902-928 MHz band.

Given the scarcity of spectrum and the need to accommodate both Part 15 devices and LMS systems in the band, SpectraLink fervently believes that the Commission should take every precaution to ensure that any rules that foreclose Part 15 operations in the band are as narrow in application as is possible. Accordingly, SpectraLink urges the Commission to reject AirTouch's proposed additions to its harmful interference definition.

Alternatively, if the Commission finds merit in AirTouch's proposal, SpectraLink urges the Commission to narrow AirTouch's proposed additions to the harmful interference definition by stating expressly that a presumption of interference will not apply where only one of the proposed criteria exists. In other words, a presumption of interference would apply *only* in those circumstances where a Part 15 device operating within one-half mile of an LMS receive site *also* transmits for more than one second every ten seconds. Further, because SpectraLink believes that specifying antenna gain without an absolute value for transmitter output power would be meaningless in the context of evaluating interference potential, SpectraLink urges the Commission to reject AirTouch's proposal to broaden the 6 dBi antenna gain limit to all Part 15.247 devices.

#### I. BACKGROUND AND STATEMENT OF INTEREST

SpectraLink was founded in 1989 to meet the existing market demand for a communications product that could provide wireless telephone communications as an adjunct to the business community's existing PBX and Centrex telephone systems. From its inception, SpectraLink has invested substantial amounts of human and financial resources designing,

manufacturing, and marketing the SpectraLink Pocket Communications System, which is an indoor micro-cellular telephone system designed to function as an extension to an individual's desk phone. Because SpectraLink's product conforms with the FCC's Part 15 Rules for unlicensed use in the 902-928 MHz band, it meets the business community's market demand for uncomplicated, reasonably priced, reliable, high-quality wireless telephony today. Although, SpectraLink is in the process of developing a similar wireless telephone product for the recently allocated isochronous (voice) segment of the U-PCS band, it expects to continue marketing and servicing its 902-928 MHz system. Consequently, SpectraLink has a direct interest in continued access to the 902-928 MHz band by Part 15 equipment manufacturers.

### II. AIRTOUCH'S PROPOSED MODIFICATIONS ARE OVERBROAD AND WOULD UNNECESSARILY FORECLOSE PART 15 OPERATIONS IN SEGMENTS OF THE BAND

AirTouch proposes that the Commission presume that Part 15 devices will cause harmful experience if they (a) operate at fixed installations located within one-half mile of an LMS receive site; (b) transmit for longer than one second over any ten-second period. It is unclear from AirTouch's Comments whether it intends that the presumption of harmful interference should be applied to all Part 15 devices operating within a half-mile radius of an LMS receive site or whether the presumption should apply only in situations where a Part 15 device operates within a half-mile radius and transmits for more than one second every ten seconds. While SpectraLink agrees that the interference potential is greater when a Part 15 device operates within a half-mile radius of an LMS system and transmits for longer than one second over any ten-second period, SpectraLink believes strongly that the existence of either circumstance alone would not likely cause interference to LMS systems and should not therefore be presumed to

cause harmful interference. In SpectraLink's view, such an overbroad interpretation of AirTouch's imprecisely drafted proposal would categorically exclude Part 15 devices from segments of the band without any evidence of interference. Such a result is unnecessary and would be contrary to the public interest. Accordingly, SpectraLink urges the Commission to reject AirTouch's proposed additions to the category of Part 15 devices that may be presumed to cause harmful interference.

Alternatively, if the Commission finds that a combination of the two factors would likely cause harmful interference, then it should interpret AirTouch's proposals concerning harmful interference conservatively and state expressly that both conditions must be present to create a presumption of harmful interference to LMS systems.

Although not an ideal solution to the interference problems inherent in operating LMS and Part 15 devices in the same band, SpectraLink believes that the Commission's proposals with respect to circumstances where harmful interference from Part 15 devices would likely occur are narrowly circumscribed, reasonable and advances the public interest in maintaining Part 15 device access to the band. AirTouch's proposal that the 6 dBi antenna gain limit be applied to all Part 15.247 devices in addition to 1 watt Part 15.247 devices is unsound and contrary to the public interest. SpectraLink submits that specifying antenna gain without specifying an effective radiated power ("ERP") is meaningless because it is the combination of the transmitter output power and the antenna gain that determines the effective radiated power of a device that may cause interference.

The Commission's proposed rule recognizes this fact and specifies an absolute power value of 1 watt. SpectraLink concurs with the Commission that a 1 watt device with a 6 dBi antenna gain is a relatively high-power device that would likely cause interference to an LMS

receive site. Thus, a presumption of harmful interference may be appropriate in that

circumstance. In contrast, a 1 milliwatt device with an antenna gain of 6 dBi is a relatively low-

power device that would not likely cause interference. Thus, an absolute power value must be

identified in order for an antenna gain limit to have any meaning in the context of minimizing

interference to LMS systems. In SpectraLink's view, the Commission's proposed 6 dBi antenna

gain limit on 1 watt Part 15.247 devices is reasoned, sound and in the public interest.

Accordingly, it should be adopted without modification.

Ш. **CONCLUSION** 

For the foregoing reasons, SpectraLink urges the Commission to adopt its compromise

plan as proposed.

Respectfully Submitted,

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